

MY HOUSE & ENERGY

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POST WAR HOUSING STOCK: 1965 – SEMI-DETACHED,



- 1965
 - housing finance new build targets-> cheap @ high volume
 - Energy: Magnox reactors would mean electricity 'too cheap to meter'
- 55 years later
 - Rooms in Roof – no insulation of dormers and adjacent roof voids below ceiling
 - Poor joinery (UPVC 'upgrades' in place but front door single pane glass with panel)
 - Ground floor joist and board timber – void underneath
 - Cavity block work walls (100mm cav)
 - Loft space unboarded and often insulated

HISTORY OF REMEDIAL WORK: 2003-2018

- Moved in 2003
- Cavity Wall insulation 2004
- Thermal imaging to see heat loss.
- Internal dormer wall insulation below windows (- 1st floor rooms like 'shed' construction- could see the street behind plasterboard) 2005
- New insulated cedar front door 2007
- Solar water 2008
- Log burner 2009
- Green Streets 2009-10– thicker loft insulation (& much teeth sucking)
- Dormer cheeks insulated when replacing lead flashing to dormers 2010
- 2011 – moved to New York and let the property..Arrived back 2018.

THE PAST TWO YEARS

- **Finance:**

- Savings at historic low interest rates below inflation – not just ‘pay-back’ but consider relative returns on capital outlay compared to savings.
- Lump sum from NYC employment and inheritance – ‘retirement’ in 5-10 years time

- **Choice: to stay put and improve or to move and improve**

- (new houses not attractive plots/room size and Poundbury aesthetic-pathetic)?

- **Decision**

- Stay put and avoid venal estate agents and transaction costs: Transform boring semi into an inspirational building
- Sustainability over next 25-30 years
 - Energy and Carbon
 - Social Care needs in third age
 - Work from home

- **Design, Planning Permission and Project Start**

- Design 2018-19
- WCC Planning Permission August 2019
- Start ~~May~~ July 2020 !

THE VISION



- Single storey timber frame & timber clad large 'T shaped in plan' extension. High insulation spec
- Remedial energy and insulation
 - Gas boiler -> AS heat pump (GS via borehole hugely costly, bad geology)
 - P.V. (expand incrementally)
 - Insulation
 - Highest spec on new build element
 - Refill gable wall after part demolition
 - Clad gable wall
 - Underfloor insulation on gf
 - Dormer roof insulation

PROGRESS AND GOVERNMENT GRANTS ETC

- **Got specs for insulation work in May-June 2020 with Warmcare Insulation Ltd**
 - Go ahead on UF and Dormer Roof Insulation – subject to work and firm registration with GHG
 - Good for uf but company not registered for ‘rooms in roof’ despite 20+ years of experience
 - Different UF insulation quotes – via crawlspace or from top (top preferred). New templates from Govt delay
 - Delays on project build – and from waiting for company registration for ‘type of insulation work’.... but confusion with what qualifies and how to claim, need to update quotes.
 - Not go ahead with
 - Replacing ‘lost’ cavity wall insulation (it was mineral fibre and stuck in cavity – no loss)
 - Gable wall external insulation – WCC planners advised ‘No’: evidently the aesthetic of 1960s fake Bath Stone blockwork has to be preserved!????
- **Heat pump**
 - Borehole(s) – bonkers costs as poor geology (2x175m boreholes needed -£25k just for drilling)
 - Yes to ASHP – fitted and first commissioned Nov20. RHI to be claimed (new EPC) – approx. £7k over 3 years)
- **PV** panels installed 23rd-27th November on front ridge of house
 - Planning permission needed for next steps: arrays on flat roof(s)

WILL WE BE FINISHED, WARM AND ENERGY EFFICIENT BY CHRISTMAS?



- Hmmmm, very uncertain.
- SEG Octopus Outgoing (5.5p per KW) and set off against ASHP running costs begin next week.
- BUT.....
- Living the Grand Designs cliché of late glass (via awful UK agent for Vitrocsa)
 - Knock on to RHI claim due to EPC
- Slippage and uncertainty on build (supplies, Covid and contractors)
 - Knock on to RHI claim due to water tank delay -> EPC delay
- GHC application in (with revised quotation to Govt template)
- RHI and GHG confirmation will probably not be ready for Xmas????? (WCI had 6,000 invoices to redo, its customers' GHG claims made in September still not processed for installation).

Thank You